

Rochester Gas and Electric Corporation Solicitation Results and Other Alternatives

December 23, 2014



Ginna/Contract Background

- R. E. Ginna Nuclear Station, LLC (“Ginna”)
 - Formerly owned by Rochester Gas and Electric Corporation (“RG&E”)
 - Sold to Constellation Energy Group in 2004
 - Current nuclear operating license expires in September 2029
 - Current output approximately 580 MW
- With the sale RG&E entered into a 10 year power purchase agreement (“PPA”)
 - Expired June 30, 2014
 - RG&E purchased approximately 90% of Ginna output
 - PPA Average Annual Energy Rate = \$41.65 per MWh (seasonal shaping)
 - PPA Capacity Rate = \$1.50 per kw-month winter, \$2.20 per kw-month summer
 - Unit contingent
 - The marked to market value of the Ginna PPA was collected from or passed back to all RG&E delivery customers through the transition charge.
 - The transition charge mechanism created a hedge value from the PPA contractual purchases for non-demand billed customers (“DSO”) on a load ratio share basis.

Legal/Regulatory Update

Ginna filed a petition with the NYPSC on July 11, 2014

- RG&E submitted an accompanying letter verifying the reliability need.

November 14, 2014 Commission Order (Case 14-E-0270)

- In response to Ginna's petition, the Commission
 - Ordered Ginna and RG&E to negotiate an RSSA and file the agreement by January 15, 2015 or submit separate filings if the parties are unable to reach agreement.
 - Directed RG&E to submit the initial responses to its October 6, 2014 Rochester Area Reliability Needs Solicitation by November 25, 2014.
 - Directed RG&E to report its analysis of the short list of qualified bidders by December 23, 2014.
- The order also directed RG&E to "...evaluate, if viable, cost effective substitutes for the Facility, including generation, transmission and other resources..."
 - RG&E has identified a transmission solution set that may shorten the duration of the RSSA and allow for the retirement of the Ginna facility.

Ginna – Reliability Need Background

- The RG&E reliability study analysis found violations on the local non-BPTF system. Starting with the summer 2015 and summer 2018 cases provided by the NYISO, RG&E adjusted the Rochester area load to RG&E’s forecast levels (1857 MW for 2015 and 1955 MW for 2018). RG&E made no changes to other zonal loads or generation dispatch levels; 115 kV PAR settings are as noted in Appendix B. RG&E then conducted a load flow analysis of the non-BPTF for pre-contingency and N-1 contingency conditions with Ginna modeled in-service and out-of-service.
- RG&E’s results corroborate the NYISO findings with respect to both pre-contingency and N-1 overloads of the Pannell Road 345/115 kV transformers and other 115 kV elements with Ginna out-of-service in both the 2015 and 2018 cases. RG&E also noted voltage violations in the base case and under contingency in its 34.5 kV and lower voltage systems for both study year cases.
- The study results indicate that, for the system as modeled, the retirement of Ginna would result in bulk and non-bulk reliability criteria violations in years 2015 and 2018. A mitigation solution equivalent to the impact of the full output of the Ginna plant would be necessary to maintain reliability in the Rochester area.

Solicitation Reliability Need Underlying Assumptions

- Reliability Need
 - Under system normal conditions, RG&E needs resources anytime the load is above 1430 MW. Based upon history, the load for 2015 is expected to be above 1430 MW for 205 hours. It is load dependent, but the maximum amount of resources RG&E estimates it will need is 180 MW. Similarly, under certain contingencies, RG&E will need resources whenever the load is above 760 MW. Based upon history, the load for 2015 is expected to be above 760 MW for 7165 hours and depending on the timing of the contingency, RG&E could need up to 580 MW.
- Reliability Term
 - January 1, 2015 – September 30, 2018

Solicitation Process

- The Solicitation was issued on October 6, 2014 to over 95 potential bidders.
- Pre –bid meeting was held October 14, 2014, 6 parties participated
- Six bids, some with multiple options, were received on November 21, 2014

Solicitation – Proposals Received

- Red- Option 1
- Red - Option 2
- Red - Option 3
- Orange
- Yellow – Option 1
- Yellow – Option 2
- Yellow – Option 3
- Yellow – Option 4
- Yellow – Option 5
- Green
- Blue
- Indigo

Solicitation Evaluation

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- The in-service date of the proposed bids are staggered.
 - Cumulative MW are provided in the table below

Year I/S	Summer MW
2015	0.0
2016	94.2
2017	475.2
2018	547.2

RG&E Transmission Solution Set

- RG&E has identified a transmission solution set that will allow for the retirement of the Ginna facility
 - Station 122
 - Upgrade three 345/115 kV transformers
 - Upgrade 115 kV Circuit Breakers
 - New 115 kV, GIS system
 - Station 80
 - New 345 kV one and a half breaker bay
 - Sub-Transmission lines:
 - Upgrade 4 sub-transmission lines (three 34.5 kV circuits and one 11.5 kV circuit)
 - Other
 - Substation work on adjacent substations
 - Protection and control upgrades

Recommendation and Next Steps

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Appendices

Red

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Orange

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Yellow

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Green

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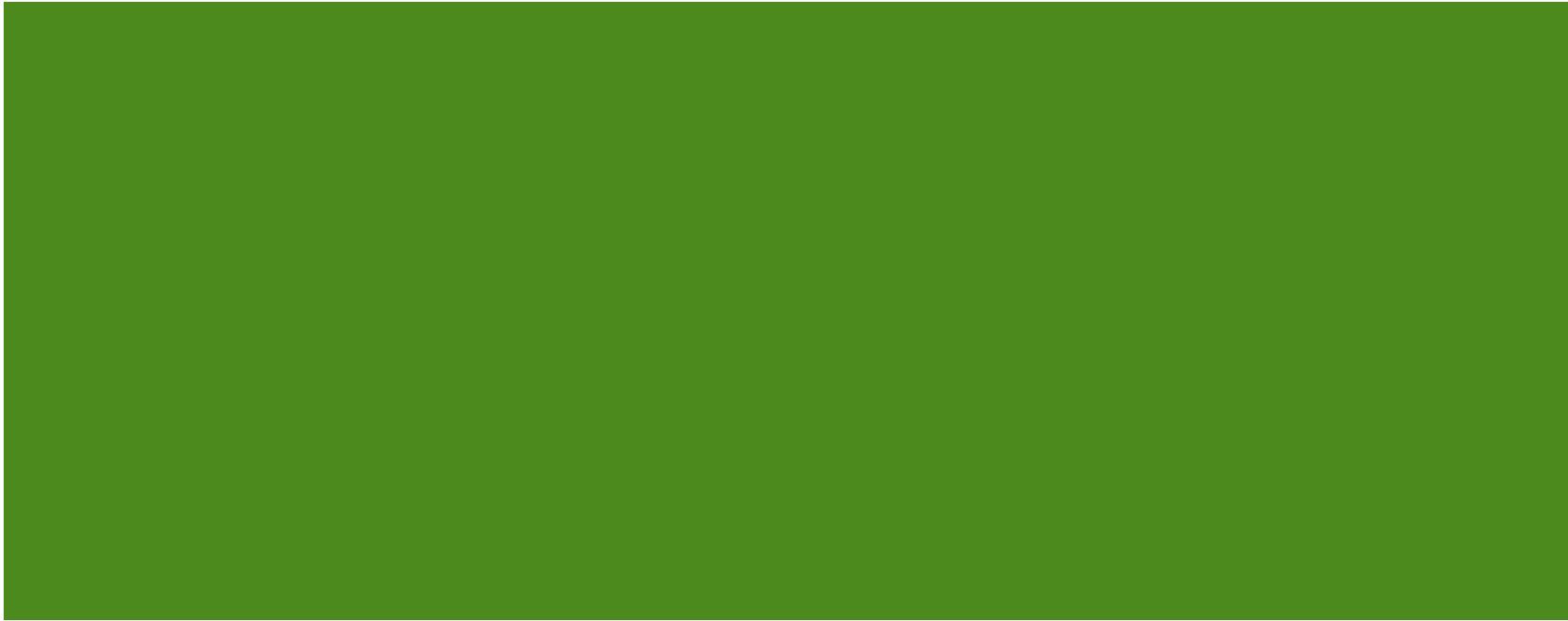


Blue

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Indigo

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Bidder Key

- Red
- Orange
- Yellow
- Green
- Blue
- Indigo

